

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte THOMAS J. MORAVEC, MARTIN L. HAGE,  
and  
EDWARD A. TRAVNICEK

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Appeal No. 2004-2352  
Application No. 09/854,419

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ON BRIEF

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Before CAROFF, GARRIS, and OWENS, Administrative Patent Judges.  
CAROFF, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 3-10, 13-17 and 19.

The appealed claims relate to a multilayer photochromic element which includes a photochromic layer having a polyester urethane binder component.<sup>1</sup>

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<sup>1</sup>We note that appellants' brief repeatedly refers to the binder component as being composed of a "polyether" urethane. We presume that appellants meant to refer to "polyester" urethanes as recited in the claims, and that the references to polyether urethanes were made in error.

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Appellants stipulate on page 9 of their brief that all of the appealed claims stand or fall with the patentability of claim 1. Accordingly, we shall limit our consideration to claim 1 which reads as follows:

1. A laminable photochromic element comprising a photochromic layer comprising a polyester urethane binder and a photochromic compound, the photochromic layer adhered to one surface of a polymeric layer comprising a polycarbonate resin or a polysulfone resin, wherein the photochromic layer is sandwiched between two polymeric layers, each of the two polymeric layers comprising a polymer selected from the group consisting of polycarbonate and polysulfone resins.

The prior art references relied upon by the examiner are:

Bhalakia et al. (Bhalakia)	5,757,459	May 26, 1998
Ormsby et al. (Ormsby)	4,889,413	Dec. 26, 1989
Rosthauser et al. (Rosthauser)	6,107,395	Aug. 22, 2000

Additionally, the following reference has been cited by the appellants:

Bowles et al. (Bowles)	6,187,444 B1	Feb. 13, 2001
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All of the appealed claims stand rejected under 35 U.S.C. § 103 for obviousness in view of Bhalakia taken in combination with either Ormsby or Rosthauser.

We have carefully considered the issues in this case in light of the evidentiary record and the opposing positions taken by the appellants and the examiner on appeal. Having done so, we conclude that the examiner has established a prima facie case of

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obviousness which is not outweighed by the evidence of nonobviousness adduced by the appellants. Accordingly, we shall affirm the rejections at issue.

Since we are in substantial agreement with the examiner's position, as set forth in the examiner's answer, we adopt that position as our own. Indeed, the answer includes an exceptionally thorough and cogent analysis and treatment of the issues on appeal. For that reason, we offer the following remarks for purposes of emphasis.

As the examiner indicates, Ormsby and Rosthauser evidence the conventionality of using polyester urethanes as the binder component for photochromic compounds used, as in Bhalakia, in multilayer optical elements to form ophthalmic lenses. Ormsby even suggests that polyurethane binders can, in general, be expected to provide enhanced fatigue resistance to photochromic articles (Ormsby: col. 2, ll. 10-17). Thus, the obviousness of using a polyester urethane as the binder in the photochromic layer of Bhalakia is manifest.

With regard to the prima facie case of obviousness, we are mindful that the appellants have cited Bowles for the proposition that problems associated with the application of polarizing layers to a lens blank do not obtain when the focus is upon

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application of photochromic layers. However, we agree with the examiner that the collective teachings of the references applied against appellants' claims suggest a "laminable" photochromic element, as claimed. Therefore, whatever problems may exist when applying a polarizing layer are of no moment when considering the application of a photochromic layer.

Appellants rely upon the comparative data presented on pages 21-24 of their specification to demonstrate the superior performance obtained by using a polyester urethane as a binder component for a photochromic material as compared to use of a polyether urethane. In our opinion, the evidence relied upon by appellants does not overcome the prima facie case of obviousness for the following reasons:

First of all, the appellants do not aver, nor have they otherwise established, that the results they have presented in their specification would have been unexpected. Attorney argument to that effect in the brief is no substitute for objective evidence lacking in the record.

Second, we agree with the examiner that the evidence relied upon by the appellants is not commensurate with their claims which are of broader scope. In this regard, we note that the comparative testing conducted by the appellants apparently

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involved a comparison between a single polyester urethane and a single polyether urethane; whereas claim 1 is not limited to any particular polyester urethane.

Moreover, all of appellants' data relate to a single mixture of two photochromic dyes (CR49 and CR59); whereas appellants' claims are not limited to any particular photochromic compound or mixture. In this regard, we note that there are apparently a wide variety of known photochromic compounds, both organic and inorganic (Bhalakia: col. 7, ll. 52-67; instant specification: page 3, ll. 1-4).

Additionally, besides the fact that appellants' data is limited to the testing of just one polyester and one polyether urethane, appellants have not identified the tested polymers in terms of their chemical structure. Thus, it cannot be determined from the data presented whether the tested polyester and polyether urethane are comparable in terms of molecular weight, functional group content, and extent of crosslinking. Also, it is not clear whether the tested polyester and polyether urethane are comparable to those identified in Ormsby or Rosthauser.



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